TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID	:	**CP-RW-2020-01-14-01**	**Date:16-01-2020**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub division, BBMP, Bangalore.	
Address	:	Vidyaranyapura Sub division, BBMP, Bangalore.	
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding areas in ward No.09(Vidyaranyapura) Vidyaranyapura Sub Division.	
Agency	:	Sri. Ningannagowda V Patil, #57/7, Sri.Krishna Nilaya, 2nd Main road, Ganganagar layout, Ganganagar, R.T.Nagar (P), Bangalore-560032.	
Identification of Road		KHB Colony 2nd Cross	
Source of Sample	:	Sample supplied by Agency	
Date of Receipt	:	14-01-20	
Sample ID No	:	2020-01-14-01/01	
Type of Mix	:	BC (Bituminous Concrete)	
Date of test	:	14-01-20	

Sl.no	Description	Index	Trail 1
1	Weight of the Sample	A	500
2	Weight of the sample After extraction	B	474
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	5.2

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Technical Manager

Assistant Executive Engineer
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Lab ID : **CP-RW-2020-01-14-01** **Date:16-01-2020**

Sample ID : **2020-01-14-01/01**

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 474

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	0	0	0.0	100.0	79-100
9.5	19	19	4.0	96.0	70-88
4.75	210	229	48.3	51.7	53-71
2.36	188	417	88.0	12.0	42-58
1.18	38	455	96.0	4.0	34-48
0.6	5	460	97.0	3.0	26-38
0.3	3	463	97.7	2.3	18-28
0.15	3	466	98.3	1.7	12-20
0.075	3	469	98.9	1.1	4-10

Note:-

The results pertain to the samples received by the customer and tested

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TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 27-12-19**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-12-19
Type of Mix	:	WMM (Wet Mix Macadam)
Date of test	:	24-12-19
Oven Dry Weight	:	11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	315	315	2.9	97.1	95-100
22.4	2259	2574	23.4	76.6	60-80
11.2	2179	4753	43.2	56.8	40-60
4.75	2251	7004	63.7	36.3	25-40
2.36	1621	8625	78.4	21.6	15-30
0.6	623	9248	84.1	15.9	8-22
0.075	1338	10586	96.2	3.8	0-5

Note:-

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TEST REPORT OF AGGEGRATE IMPACT VALUE
IS: 2386 Part IV

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 27-12-19**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-12-19
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	24-12-19

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	300.2	300.2
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	73.9	74.0
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	225.9	225.8
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.4	0.4
5	Aggregate impact value	(B/A)*100	24.6	24.7
6	Aggregate impact value (Mean of two tests)	Pecentage	24.6	

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DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 27-12-19**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	24-12-19
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	24-12-19

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.8%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.5%	
Combined Flakiness and Elongation Index for WMM	25.3%	

Note:-
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TEST RESULTS OF GRADATION FOR BM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BM-Plant (Bituminous Macadam)
Date of test		02-01-20
Weight of Sample(gm)	:	5000

IS Sieve Size(mm)	Weight Retained(gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-7(grading -2)
26.5	0	0	0	100	100
19	165	165	3.3	96.7	90-100
13.2	512	677	13.5	86.5	56-88
4.75	2759	3436	68.7	31.3	16-36
2.36	911	4347	86.9	13.1	4-19
0.3	358	4705	94.1	5.9	2-10
0.075	232	4937	98.7	1.3	0-8
PAN	63	5000	100.0	0.0	0

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PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS MACADAM

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BM (Bituminous Macadam)
Date of test	:	02-01-20

Table 500-6 : Physical Requirements fo Coarse Aggregate for Bituminous Macadam

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	13.8	Combined Flakiness & Elongation Index for BM is Maximum 35%	IS:2386 Part I
	Elongation Index	7.2		
Strength	Aggregate Impact Value	25.2	Maximum 30%	IS:2386 Part IV
Specific gravity	Specific gravity	2.51	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.17	Maximum 2%	IS:2386 Part III

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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BM(Bitumnous Macadam)
Date of test	:	02-01-20

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.0	2.0	98.2	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

Note:-
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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BM (Bituminous Mecadam)
Date of test	:	02-01-20

The results of the tests conducted on the Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.29	11.82	9KN(Min)
2	Marshal flow at 60°C, mm	3.54	3.87	2-4
3	Percent air Voids	4.56	4.17	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.54	14.76	13-15
5	Percent Voids filled with Bitumen(VFB %)	68.98	70.28	65-75
6	Density, g/cc	2.42	2.40	–

Note:-
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TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BM (IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2020-01-20-56**	**Date: 09-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.	
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.	
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.	
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.	
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20	
Source of Sample	:	Sample supplied by Agency	
Date of Receipt	:	08-01-20	
Type of Mix	:	BM (Bituminous Macadam)	
Date of test	:	08-01-20	

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	500
2	Weight of the sample After extraction	B	470	465
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	6	7.00
4	Average percentage	%	6.50	

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Lab ID : **CP-RW-2020-01-20-56** **Date: 09-01-20**

AFTER EXTRACTION(Trail-1)

Weight of Sample : 470 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-7(grading -2)
26.5	0	0	0.0	100.0	100
19	38	38	8.1	91.9	90-100
13.2	147	185	39.4	60.6	56-88
4.75	191	376	80.0	20.0	16-36
2.36	28	404	86.0	14.0	4-19
0.3	32	436	92.8	7.2	2-10
0.075	31	467	99.4	0.6	0-8

AFTER EXTRACTION(Trail-2)

Weight of Sample : 465 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-7(grading -2)
26.5	0	0	0.0	100.0	100
19	38	38	8.2	91.8	90-100
13.2	147	185	39.8	60.2	56-88
4.75	191	376	80.9	19.1	16-36
2.36	28	404	86.9	13.1	4-19
0.3	32	436	93.8	6.2	2-10
0.075	20	456	98.1	1.9	0-8

Note:-
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TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BC-Plant (Bituminous Concrete)
Date of test	:	02-01-20
Oven Dry Weight	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	89	89	1.8	98.2	90-100
9.5	702	791	15.8	84.2	70-88
4.75	895	1686	33.7	66.3	53-71
2.36	587	2273	45.5	54.5	42-58
1.18	492	2765	55.3	44.7	34-48
0.6	503	3268	65.4	34.6	26-38
0.3	528	3796	75.9	24.1	18-28
0.15	458	4254	85.1	14.9	12-20
0.075	350	4604	92.1	7.9	4-10
PAN	396	5000	100	0.0	0

Note:-
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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BC(Bitumenous Concrete)
Date of test	:	02-01-20

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

Note:-
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Samples will be disposed after 90 days from the date of issue of test certificate

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

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R RUDRAPRASAD
Authorized Signatory
Technical Manager

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PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

Lab ID : **CP-RW-2020-01-20-56** **Date: 05-01-20**

Customer : Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.

Address : Vidyaranyapura Sub Division, BBMP, Bangalore.

Project Name : Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.

Agency : Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.

Customer Reference : BBMP/EE/BTP/WO/11/2019-20

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 02-01-20

Type of Mix : BC (Bituminous Concrete)

Date of test : 02-01-20

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.4	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	11.8		
Strength	Aggregate Impact Value	22.1	Maximum 24%	IS:2386 Part IV
Specific gravity	Specific gravity	2.68	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.21	Maximum 2%	IS:2386 Part III

Note:-

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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 05-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	02-01-20
Type of Mix	:	BC (Bituminous Concrete)
Date of test	:	02-01-20

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

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Vidyaranyapura Sub Division
BBMP, Bangalore - 97

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TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : **CP-RW-2020-01-20-56** **Date: 12-01-20**

Customer : Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.

Address : Vidyaranyapura Sub Division, BBMP, Bangalore.

Project Name : Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.

Agency : Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.

Customer Reference : BBMP/EE/BTP/WO/11/2019-20

Source of Sample : Sample supplied by Agency

Date of Receipt : 10-01-20

Type of Mix : BC (Bituminous Concrete)

Date of test : 10-01-20

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	501
2	Weight of the sample After extraction	B	477	476
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	4.60	4.99
4	Average percentage	%	4.8	

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Vidyaranyapura Sub Division
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Lab ID : **CP-RW-2020-01-20-56** **Date: 12-01-20**

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 477

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	4	4	0.8	99.2	90-100
9.5	62	66	13.8	86.2	70-88
4.75	112	178	37.3	62.7	53-71
2.36	88	266	55.8	44.2	42-58
1.18	29	295	61.8	38.2	34-48
0.6	11	306	64.2	35.8	26-38
0.3	46	352	73.8	26.2	18-28
0.15	45	397	83.2	16.8	12-20
0.075	55	452	94.8	5.2	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 476

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	4	4	0.8	99.2	90-100
9.5	62	66	13.9	86.1	70-88
4.75	112	178	37.4	62.6	53-71
2.36	88	266	55.9	44.1	42-58
1.18	29	295	62.0	38.0	34-48
0.6	11	306	64.3	35.7	26-38
0.3	46	352	73.9	26.1	18-28
0.15	45	397	83.4	16.6	12-20
0.075	55	452	95.0	5.0	4-10

Note:-

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Format No: CP/TF/01

TEST REPORT ON BITUMEN

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 31-12-19**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer's Reference	:	BBMP/EE/BTP/WO/11/2019-20
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	30-12-19
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-1220(1978) (Reaffirmed-2004)
Date of test	:	30-12-19

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	64	60 to 70
2	Softening Point, °C	51.2	Min. 40°C
3	Ductility, cm	98	Min. 75cm
4	Flash point, °C	246	Min. 220°C
	Fire point, °C	272	

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****End of Report****

DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID	:	**CP-RW-2020-01-20-56** **Date: 11-01-20**
Customer	:	Assistant Executive Engineer, Vidyaranyapura Sub Division, BBMP, Bangalore.
Address	:	Vidyaranyapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements and Asphalting to Roads at Durga Parameshwari Layout and Surrounding Area in Ward No. 09 (Vidyaranyapura) Vidyaranyapura Sub Division.
Agency	:	Sri. Ninganagowda V Patil #57/7, Sri. Krishna Nilaya, 2nd Main Road, Ganganagara Layout, Ganganagara, R.T.Nagara (P) Bangalore-560032.
Customer Reference	:	BBMP/EE/BTP/WO/11/2019-20
Sample Condition	:	Satisfactory
Date of Receipt	:	10-01-20
Type of Mix	:	Tack coat
Date of test	:	10-01-20

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
2	Area of Plate (a)	Sq.mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.803	0.771
5	Weight of tack Coat (d=c-b)	Kg	0.023	0.023
6	Rate of spread of tack coat	Kg/sq.m	0.256	0.256
7	Average	Kg/sq.m	0.256	
8	Specified Limit	Kg/sq.m	0.250 Kg/sq.m	

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